

### REMARKS

The Office Action mailed April 8, 2003 (Paper No. 26) has been carefully reviewed and the foregoing amendments are made in response thereto. In view of the amendments and the following remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Applicants respectfully submit that no prohibited new matter has been introduced by the amendments. Support for a “catalytically inactive desaturase” may be found throughout the specification and, for example, on pages 68-69. Entry of the amendment is respectfully requested.

### *Status of the Claims*

Upon entry of the foregoing amendment, claims 35-41 will be pending.

### *The Rejection under 35 U.S.C. § 112 Second Paragraph*

Applicants acknowledge, with appreciation, the indication that the rejection of claims 7-9, 11, 14 and 15 under 35 U.S.C. § 112 second paragraph has been withdrawn.

### *The Rejections under 35 U.S.C. § 112 First Paragraph*

Claims 39-41 stand rejected under 35 U.S.C. § 112, first paragraph for allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to a person having skill in the art that the inventor had possession of the claimed invention at the time of filing. Applicants respectfully traverse the rejection for the following reasons.

The Office Action indicates at page 3, first paragraph that claims 39-41 are rejected “because these claims are not limited to use of nucleic acids encoding catalytically inactive desaturases.”

Applicants respectfully point out that claim 39, and dependent claims 40-41, have been amended to recite a nucleic acid comprising a sequence which encodes **a catalytically inactive desaturase which is** a dominant negative mutant of a fatty acid desaturase. Withdrawal of the rejection is respectfully requested.

Claims 35-41 stand rejected under 35 U.S.C. § 112, first paragraph, because it is alleged that the claims contain subject matter which was not described in the specification in such a way as to enable a person having skill in the art to make and/or use the invention. Applicants respectfully traverse the rejection for the following reasons.

The office action, in the sentence spanning pages 3 and 4 alleges that “there is no support provided [in the specification] for the effect of expression in a plant of a mutant desaturase that is catalytically inactive.” This statement is the basis for the allegation that the claimed subject matter is not described in the specification in such a way as to enable the claimed invention.

Applicants respectfully disagree with the assertion that “there is no support provided [in the specification] for the effect of expression in a plant of a mutant desaturase that is catalytically inactive.” Applicants direct the Examiner’s attention to the description of the invention set forth on page 67, line 6 to page 69, line 23 of the specification which is specifically directed to the effects of transforming plants with mutant forms of desaturase enzymes that are catalytically inactive.

Applicants disclose expression of catalytically inactive forms of desaturase from *Arabidopsis* or other plants in transgenic soybean, rapeseed, *Crambe*, *Brassica juncea*, canola, flax, sunflower, safflower, cotton, cuphea, peanut, coconut, oil palm or corn and indicate that this may lead to inactivation of the endogenous desaturase activity in these plants. In a further embodiment, expression of catalytically inactive forms of other desaturases may also lead to inactivation of the corresponding desaturases (see page 68 lines 11-21).

Applicants respectfully assert that the specification enables the claimed invention because no undue experimentation would be required to make a nucleic acid encoding a catalytically inactive desaturase and then transform any desired plant to produce seeds having an altered amount of an unsaturated fatty acid. Withdrawal of the rejection is requested.

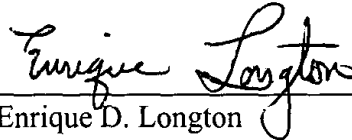
### ***Conclusion***

In view of the foregoing remarks, Applicants respectfully request withdrawal of all outstanding rejections and early notice of allowance to that effect. Should the Examiner believe that a telephonic interview would expedite prosecution and allowance of this application, she is encouraged to contact the undersigned at her convenience.

Except for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No.50-0310. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

**MORGAN, LEWIS & BOCKIUS LLP**



Enrique D. Longton  
Reg. No. 47,304

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**Customer No. 009629**

**MORGAN, LEWIS & BOCKIUS LLP**

1111 Pennsylvania Ave., N.W.

Washington, DC 20004

202.739.3000 (voice)

202.739.3001 (fax)